

An Activity Newsletter for Kids by Utah's Project WILD--Fall 1999

Eagles, Hawks and Falcons: Skilled Hunters of the Sky

Take a look! Just above the skyline, a golden eagle is soaring high. Down the street, a red-tailed hawk is perched on top of a telephone pole. Closer than you think, a kestrel is hovering over the roadside grass. In our own neighborhoods, these majestic birds are all hunting other animals for a meal.

Many species of birds hunt other animals for food. They are predators, and are sometimes called **birds of prey**. Eagles, hawks and falcons are a special kind of bird of prey called **raptors**. Raptors have three features other birds of prey do not have:

- ***Excellent eyesight.*** A raptor can see small movements from a long distance away. Can you imagine having binoculars for eyes? That is how well a raptor can see.
- ***Strong feet with sharp talons.*** Raptors use their feet and talons to grab and pierce their prey. They move quickly with great strength. Their prey usually dies instantly.
- ***Large hooked beaks.*** Raptors have hooked beaks that make it easy to tear up their favorite food. Some raptors eat insects or reptiles. Others eat small mammals or fish.

These special features make raptors very skillful predators.

*Bonus Fact: Owls are raptors, but are different than eagles, hawks and falcons. Besides having a different body shape, most owls are **nocturnal**. They hunt at night. Eagles, hawks and falcons are **diurnal**, which means they hunt during the day.*

Put on Your Wings and Fly Like a Raptor!

Eagles, hawks and falcons each have a unique style of flying. Stand up, let your arms become your wings and learn how these diurnal raptors fly.

Golden eagles have very large wings that are long and broad. They soar and glide most of the time. An occasional big flap, every now and then, will keep them going for a long time. *Stand tall with your arms stretched out like a golden eagle: Soar, while counting to 40. Make one big, slow, steady flap with your wings. Soar, while counting to 40. Repeat.*

Red-tailed hawks have medium to large, broad wings. They switch a lot between soaring and flapping their wings. Their wingbeats are strong and steady. *Stretch your arms out and fly like a red-tail: Soar, while counting to 20. Then for another 20, flap with wings that look strong and steady. Soar, while counting to 20. Repeat.*

Goshawks have medium-sized wings. They are shorter and more rounded than the red-tail's. Their flight is a pattern of three or four quick flaps, then a glide. *Stretch your arms out and follow the pattern of a goshawk in flight: Flap, Flap, Flap, Flap. Glide, while counting to 10. Flap, Flap, Flap, Flap. Glide, while counting to 10. Repeat.*

Peregrine falcons have long tapered wings that come to a point. They fly fast and direct, without soaring. They look as if they have someplace to go and will be late if they don't hurry. *Standing tall with a purpose, flap your wings like a peregrine: Flap, Flap, Flap, Flap, Flap, Flap, Flap, Flap,...(See you later!)*

If you keep a watchful eye, you may witness these winged predators of the sunlit sky.

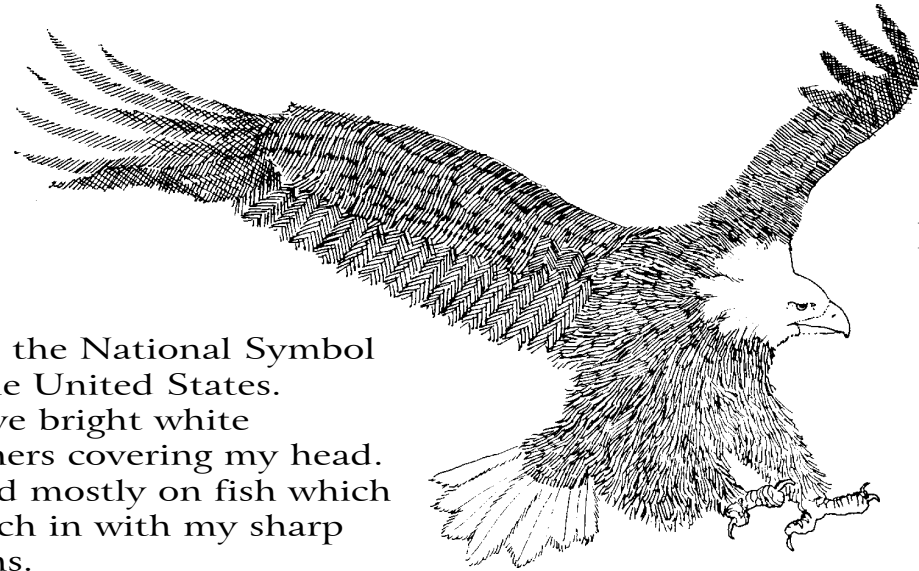


Raptor Who's Who?

Many different types of raptors - eagles, hawks and falcons - can be found in Utah. Some like the red-tailed hawk, the golden eagle, the prairie falcon and the sharp-shinned hawk spend their entire lives in the state. They are called "permanent residents." Others like the bald eagle and the rough-legged hawk are common in Utah only in the winter. And still others such as the Swainson's hawk and the osprey are found here only in the summer. Some like the broad-winged hawk just pass through on their yearly migration from their nesting grounds in the north to their wintering areas in the south and back.

Raptors come in all sizes, shapes and colors but sometimes they can be hard to identify. People who watch raptors and try to identify them use a few special clues. One clue they use is the shape of their wings. Eagles, which are very large, have broad, flat wings for soaring high on thermals and updrafts near cliffs and mountain ridges. Hawks that live in the forests have short, rounded wings that help them make sharp turns and move quickly through the trees to capture their prey. Falcons, which can grasp prey in the air, have long narrow pointed wings which make them able to fly and dive at very high speeds.

Below are pictures of some of the different raptors that can be found in Utah. Use the written clues by each picture to try to name the species of raptor shown. When you know what it is, write the name of the raptor in the spaces provided. Afterwards, use a bird field guide to color in each raptor picture. Last, choose another raptor from Utah, draw it on another piece of paper and make up your own set of clues!



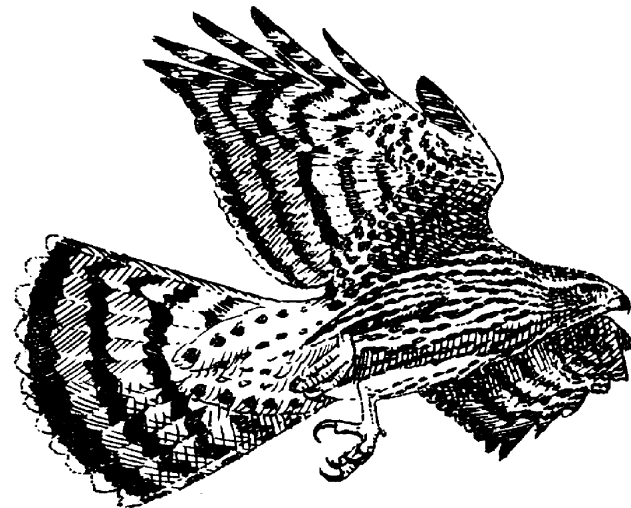
- I am the National Symbol of the United States.
- I have bright white feathers covering my head.
- I feed mostly on fish which I catch in with my sharp talons.
- I can usually be seen in Utah during the winter but a few of us nest here in the spring too.

I am the _____



- I am the smallest falcon in North America.
- I am a very colorful raptor.
- I like to perch on fence posts or utility poles where I can scan the landscape for my favorite prey, grasshoppers.
- I sometimes hover in the air like a helicopter while searching for prey.

I am the _____



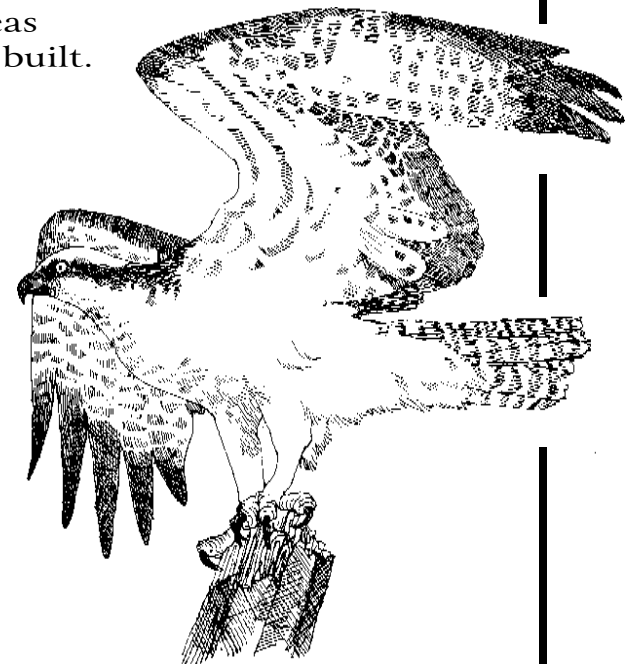
- I am a large raptor that nests near lakes and reservoirs.
- I am sometimes known as the "fish hawk."
- I have special spines and bumps on my feet to help me grip the slippery fish I eat.
- I have been able to nest in more areas of Utah where reservoirs have been built.

I am the _____



- I am a large, dark-colored soaring bird.
- I live year-round in Utah where there are canyons to fly through and cliffs to nest upon.
- I feed mostly on rodents and rabbits which I see from afar with my powerful eyes.
- I am considered a symbol of royalty in many parts of the world.

I am the _____



- I am a type of raptor with short, rounded wings that help me to turn and fly quickly.
- I am a very secretive bird that nests in thick pine and spruce forests.
- I am a skilled killer of songbirds, squirrels, snowshoe hares and grouse.
- I have steel-blue colored body feathers and bright red eyes below white feathered eyebrows.

I am the _____

Raptors - eagles, hawks and falcons - are truly amazing birds. They have been given a wealth of adaptations to make them skilled flyers and excellent predators. Eagles with their broad long wings can soar on thermals for hours, hawks with their powerful vision can spot prey from perches far above, and falcons with their long, pointed wings can stoop or dive at incredible speeds.

Solve the problems below to learn more about Utah's Radical Raptors! Don't forget to include the proper units when solving the problems. When you are done with these problems, see if you can make up some more of your own using what you've learned about other raptors.

1) Golden eagles are the largest raptors found in Utah. In desert canyon landscapes you can see these large, dark colored birds soaring on thermals in the sky above. Golden eagles have a wingspan of about 7 feet (84 inches). Stand with your arms stretched out to the sides and have a friend measure the distance from fingertip to fingertip (your "wingspan"). How much greater is the wingspan of a golden eagle than your wingspan? By the way, your "wingspan" is about the same as your height!

$$\frac{\text{Eagle's Wingspan}}{\text{Your Wingspan}} = \text{_____} \quad (\text{This is how much greater the wingspan of an eagle is than your wingspan.})$$

2) Swainson's hawks are one of the greatest migratory birds. During the summer months, they live within the grasslands and plains of western and mid-western North America. In the fall they travel in large flocks southward through Mexico and South America to their winter home in Argentina about 7,000 miles away. If they fly about 100 miles each day, how long will it take them to reach their wintering grounds?

$$\frac{\text{Total Distance}}{\text{Number of Miles per Day}} = \text{_____} \quad (\text{Number of days to reach the wintering grounds.})$$

3) Peregrine falcons are considered the fastest birds in the world. When they stoop or dive to capture their prey in flight, they can sometimes reach speeds of 200 miles per hour! If a peregrine falcon spots a pigeon it wants to catch from a distance of one-half (1/2 or 0.5) mile above, how long would the pigeon have to sense that it was about to become dinner and try to escape?

$$\frac{\text{Distance of Falcon to Pigeon}}{\text{Speed of Falcon}} = \text{_____} \quad (\text{Number of hours - change your answer to seconds by multiplying your answer by 3600, the number of seconds in an hour.})$$



4) The American kestrel is the smallest raptor in North America. If a kestrel weighs about the same as 44 pennies which each weigh 0.09 ounces about how much does a kestrel weigh?

$$\frac{\text{Weight of one Penny}}{\text{Number of Pennies equal to weight of a Kestrel}} \times \text{_____} = \text{_____} \quad (\text{Weight of a kestrel in ounces - how many pounds is this if there are 16 ounces in a pound?})$$

American Kestrel

Answers: 1) Answer varies; 2) 70 days; 3) 0.0025 hours or 9 seconds; 4) 4 ounces (rounded up) or 1/4 pound